

AMENDMENTS TO THE SPECIFICATION

Paragraph beginning on line 2 of page 18 has been amended as follows;

Retroviral-mediated elevated expression of wild-type VCIP in primary endothelial cells impeded cell migration and wound healing without altering proliferative potential of these cells. This observation suggested that VCIP might form a molecular complex on endothelial cells. A recent study showed cell-cell and basolateral sorting of VCIP (hLLP3) protein on polarized MDCK cells, while PAP2a (hLPP1) protein sorted on the apical surface. In these cells, the ecto-enzymatic activity of PAP2a remained intact, while PAP2b activity was markedly reduced. These studies also found that PAP2b contains a dityrosine (Y109/Y110) basolateral targeting motif that was first characterized in LDL receptor. The apical sorting of PAP2a is driven by the FDKTRL (SEQ ID NO: 37) amino acid sequence, a similar motif that also occurs in cystic fibrosis protein. Thus, it is possible that basolateral and cell-cell localization of VCIP serves as mechanisms to promote integrin ligation at the cell-cell junction. Many cell surface proteins have been localized in cell-cell junctions, and the existence of PAP2b-mediated cell-cell junctions *in vivo* can be examined by electron microscopy analyses. In addition, investigation into the effects of mediators of inflammation as well as ischemia, S1P, C1P, LPA, thrombin that interfere with inter-endothelial cell junction functioning should provide insights into the role of PAP2b in cell-cell contact formation and disassembly including signaling through the EDG receptor pathways and blood vessel maturation.

Please replace the page 34 originally filed on March 29, 2004 with the enclosed page.

Paragraph beginning on line 18 of page 36 has been amended as follows:

In view of the above findings, whether recombinant VCIP expression could promote adhesion of endothelial cells in primary culture was examined. In order to determine whether the VCIP-RGD motif acts as an integrin ligand, two recombinant

VCIP fragments (each 49 amino acids in length) that corresponded to a predicted second extracellular loop of the protein were generated (Figures 1L and 3H-J). The recombinant GST-VCIP-RGD protein is composed of 49 amino acid residues (amino acid residues 145-194, Figure 1L). It contains the lipid phosphatase motif (KXXXXXXRP) (SEQ ID NO: 38), but lacks a proton donor sequence, i.e., PSGH (SEQ ID NO: 39) motif (residue 196-199, Figure 1L) and -(X31-54)-SRXXXXXHXXD (SEQ ID NO: 40) sequence.

Please replace the Sequence Listing filed on July 12, 2004 with the enclosed Sequence Listing.